## ROPEAN PATENT OFF

## **Patent Abstracts of Japan**

PUBLICATION NUMBER

: 05259158

**PUBLICATION DATE** 

08-10-93

APPLICATION DATE

: 16-03-92

APPLICATION NUMBER

: 04057996

APPLICANT: HIKARI GIJUTSU KENKYU KAIHATSU KK;

INVENTOR: SASAKI MASAHIRO;

INT.CL.

: H01L 21/318 C23C 16/34 C30B 25/14 H01L 21/20 H01L 21/205

TITLE

: METHOD FOR FORMATION OF III-GROUP ELEMENT NITRIDE FILM

ABSTRACT :

PURPOSE: To effectively form a nitride film by effectively cracking ammonia at a relatively

low temperature.

CONSTITUTION: A surface of a GaAs substrate heated is turned into a Ga saturated face. A cracking cell filled with alumina fibers is heated to 300-550°C, and ammonia gas is passed therethrough. Ammonia gas, cracked using alumina fibers as catalyst, reacts

with Ga in the Ga saturated face, a GaN film being formed.

COPYRIGHT: (C) JPO